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This application is a continuation-in-part of co-pending United States Patent Application Serial Number 09/947,869, filed on September 6, 2001, which is entitled SYSTEMS AND RESOURCE MANAGEMENT IN INFORMATION **METHODS** FOR ENVIRONMENTS, the disclosure of which is incorporated herein by reference. application is also a continuation-in-part of co-pending United States Patent Application Serial Number 09/879,810 filed on June 12, 2001 which is entitled "SYSTEMS AND METHODS FOR PROVIDING DIFFERENTIATED **SERVICE** IN INFORMATION MANAGEMENT ENVIRONMENTS," and also claims priority from co-pending Provisional Application Serial No. 60/285,211 filed on April 20, 2001 which is entitled "SYSTEMS AND METHODS FOR PROVIDING DIFFERENTIATED SERVICE IN A NETWORK ENVIRONMENT," and also claims priority from co-pending Provisional Application Serial No. 60/291,073 filed on May 15, 2001 which is entitled "SYSTEMS AND METHODS FOR PROVIDING DIFFERENTIATED SERVICE IN A NETWORK ENVIRONMENT," the disclosures of each of the forgoing applications being incorporated herein by reference. This application is also a continuation-inpart of co-pending United States Patent Application Serial No. 09/797,198 filed on March 1, 2001 which is entitled "SYSTEMS AND METHODS FOR MANAGEMENT OF MEMORY," and is also a continuation-in-part of co-pending United States Patent Application Serial No. 09/797,201 filed on March 1, 2001 which is entitled "SYSTEMS AND METHODS FOR MANAGEMENT OF MEMORY IN INFORMATION DELIVERY ENVIRONMENTS," and also claims priority from co-pending Provisional Application Serial No. 60/246,445 filed on November 7, 2000 which is entitled "SYSTEMS AND METHODS FOR PROVIDING EFFICIENT USE OF MEMORY FOR NETWORK SYSTEMS," and also claims priority from co-pending Provisional Application Serial No. 60/246,359 filed on November 7, 2000 which is entitled "CACHING ALGORITHM FOR MULTIMEDIA SERVERS," the disclosures of each of the forgoing applications being incorporated herein by reference. This application is also a continuation-in-part of co-pending United States Patent Application Serial Number 09/797,200 filed on March 1, 2001 which is entitled "SYSTEMS AND METHODS FOR THE DETERMINISTIC MANAGEMENT OF INFORMATION" which itself claims priority from Provisional Application Serial No. 60/187,211 filed on March 3, 2000 which is entitled "SYSTEM AND APPARATUS FOR INCREASING FILE SERVER BANDWIDTH," the disclosures of each of the forgoing applications being incorporated herein by reference. This